Serial No. Not Yet Assigned Atty. Doc. No. 2002P11788WOUS

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Amendments To The Claims:

Please amend the claims as shown.

1-15 (canceled)

16. (new) A cooling air cooling system in a power generation station, comprising: a gas turbine having a compressor component, a combustion component, and a turbine component;

a cooling air line with a primary side;

cooling air extracted through the cooling air line from a volume of compressor air; and a heat exchanger system connected toward the primary side of the cooling air line and receives a portion of the cooling air, wherein the heat exchanger system transfers heat that is carried in the cooling air to a combustion gas flow which is supplied to the combustion chamber of the gas turbine.

- 17. (new) The cooling system as claimed in claim 16, wherein the amount of heat supplied to the combustion gas flow is changeable.
- 18. (new) The cooling system as claimed in claim 16, wherein the heat exchanger system has a secondary side.
- 19. (new) The cooling system as claimed in claim 16, wherein the heat exchanger system is connected on the secondary side of a number of circuit elements which are connected in parallel on the heat flow side.
- 20. (new) The cooling system as claimed in claim 16, wherein the heat exchanger system comprises a heat exchanger with a secondary side that is connected directly in the combustion gas flow.

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- 21. (new) The cooling system as claimed in claim 16, wherein the heat exchanger system is connected on the secondary side via an intermediate circuit to a further heat exchanger that is connected on a secondary side in the combustion gas flow.
- 22. (new) The cooling system as claimed in claim 21, via whose intermediate circuit an auxiliary steam generator can be heated.
- 23. (new) The cooling system as claimed in claim 22, wherein a connection on a heat side of the heat exchanger system to the further heat exchanger is produced via an auxiliary steam generator.
- 24. (new) A method for cooling a volume of cooling air for a gas turbine, comprising: removing a portion of air flow as cooling air flow from a compressor; extracting heat from the cooling air flow; and transferring the extracted heat to a combustion gas flow and supplying the flow to a combustion chamber of the gas turbine.
- 25. (new) The method as claimed in claim 24, wherein the amount of heat supplied to the combustion gas flow is matched to the operating state of the gas turbine system.
- 26. (new) The method as claimed in claim 24, wherein the heat flow extracted from the cooling air is divided and supplied to a number of flow elements.
- 27. (new) The method as claimed in claim 24, wherein the heat is transferred via a heat exchanger with a secondary side that is connected directly in the combustion gas flow.
- 28. (new) The method as claimed in claim 24, wherein heat is transferred from a cooling air line to the combustion gas flow via an intermediate circuit.
- 29. (new) The method as claimed in claim 28, wherein an amount of heat is transferred to an auxiliary steam generator that is connected in the intermediate circuit.

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30. (new) The method as claimed in claim 24, wherein in a first circuit an amount of heat is transferred from the cooling air flow a first heat exchanger to an auxiliary steam generator which is connected in a first circuit and is transferred to the combustion gas flow by a further heat exchanger.